The `utf8add` package

Additional support for UTF-8 encoded input

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1 Introduction

As I have discovered the easy access for special characters using the *compose key* feature, I found out that some extra support for various UTF-8 characters was needed. Hence this package.

The main purpose of this package is to make the text parts of LaTeX document source more readable for non-LaTeX users and to make more use of the possibilities with UTF-8 encoded input.

One major issue with this package is that it does *not* map input and output correct with respekt to the Unicode standards. However it makes some *available* UTF-8 input provide some *desired* outout.

As the applied support for say the mathemathical greek letters of Unicode still is scarse this is more of a workaround than a decent, native support.

The package is *hack*-ish by nature. Thus the use of this package is somewhat (quite) incompatible with documents written in greek using e.g. the LGR input encoding.

Thus puritans should not use this package.

2 Loading the package

`\usepackage{utf8add}`

2.1 The authors favourite

`\usepackage[math,nicefrac]{utf8add}`

2.2 Package options

2.2.1 Greek characters

greek The greek option takes an argument. Otherwise it will not change anything. Possible arguments are

    default The greek characters entered are typeset as LaTeX default. Uppercase greek characters upright, lowercase greek characters are in italics.

    italic Both the uppercase and the lowercase greek characters entered are typeset in italics.

    upright Both the uppercase and the lowercase greek characters entered are typeset in upright font. This is done using the upgreek package, and changes the font of the greek characters. Use with care.

uppercasegreek Same arguments as the 'greek' option. However; don't use this.

lowercasegreek The same story as for the 'uppercasegreek' option. Don't use this either.

nogreek disable the mapping of greek input. This is for compatibility with greek texts.

2.2.2 Numbers and fractions

By default numbers and fractions are typeset using the built-in support. However not all figures are supported. Additional support using math commands is provided but not overruling the built-in support. This is the same case as for fractions.

mathsuperior Typeset the all superior figures using math commands.

mathinferior Typeset the all inferior figures using math commands.

mathfigures Short cut for the two options above.

mathfractions Typeset the all fractions figures using math commands.

math Short cut for the options above.

nicefrac Use the nicefrac to typeset fractions in text mode. View section 3.1 for details.

3 Using the package

Using the package is simple. Load the package as specified above. Type your UTF-8 characters into your document.

3.1 Fractions

The default behaviour of the math support of the fractions is to typeset fractions in the default LaTeX way, that is small fractions, $\frac{1}{2}$, in text mode and larger fractions, $\frac{1}{2}$, in display mode. The fractions are set with the math font in math mode and text font in text mode.

Starring the fractions forces the fractions to be in text mode style. I find it useful in some cases such as

$$E_{\text{kin}} = \tfrac{1}{2} \cdot m \cdot v^2 \tag{1}$$

Applying the 'nicefrac' option makes the text mode fractions typeset 'nice' i.e. $^1/_2$. Starring these fractions make them default text mode style i.e. $\frac{1}{2}$.

4 Drawbacks

The support for UTF-8 is not complete. Look into the source for details.

The support for the verbatim environment and other source displaying features is not that good. In fact it probably won't work.

The imcompatibility with support for the greek language makes the use of this package less desirable for users writing in greek.

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